PATENT

Atty Docket No.: 200308756-02
App. Ser. No.: 10/840,221

IN THE CLAIMS:

Please find a listing of the claims below, with the statuses of the claims shown in parentheses. This listing will replace all prior versions, and listings, of claims in the present application.

1. (Currently amended) A system for forming a drawing of a system having a plurality of components that are to be combined comprising:

a merchandise information provider terminal adapted to be responsive to component arrangement information used to arrange the components on the drawing, responsive to estimate information used to calculate prices of the components, and responsive to a drawing-functional component diagram used to draw drawings of the components;

a component arrangement information and estimate information database for storing the component arrangement information and the estimate information adapted to be entered at said merchandise information provider terminal;

a component diagram database for storing the drawing-functional component diagram entered at said merchandise information provider terminal, wherein the component diagram database comprises a physically separate database from the component arrangement information and estimate information database;

a database server for transmitting the component arrangement information and the estimate information stored in said component arrangement information and estimate information database; and

a Web and application server for receiving a request and a condition, which are used to form a drawing, and for forming the drawing;

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said Web and application server being arranged to: (a) receive component

arrangement information corresponding to the received condition from said database server,

and (b) form the drawing of the system in which the components are to be combined based

on said received component arrangement information and the drawing-functional purpose

component diagram stored in said component diagram database.

2. (Currently amended) A method of forming a drawing of a system in which a plurality of

components are combined based on component diagram data having drawings of the

respective components stored on a component diagram database, the method being

performed with a computer having a volatile memory and a processor, the method

comprising:

    receiving component arrangement information including an arrangement of the

components on the drawing from a component arrangement information and estimate

information database, wherein the component diagram database comprises a physically

separate database from the component arrangement information and estimate information

database;

    generating, by using the processor, drawing information of the system as a bitmap

object based on the received component arrangement information and the component

diagram data; and

    storing the bitmap object in the volatile memory.

3. (Original) The method of claim 2 further including transmitting the bitmap object stored

in the volatile memory.

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4. (Original) A method of forming a drawing of a system as claimed in claim 3 wherein:

said step of transmitting said bitmap object includes transmitting said bitmap object

by streaming.

5. (Currently amended) A method of forming a drawing of a system as claimed in claim 2

wherein:

said component arrangement information and said component diagram data are stored

independently of each other.

6. (Original) A method of forming a drawing of a system as claimed in claim 2 wherein:

said component arrangement information includes the coordinates of a component,

the size of the drawing, the scale of the drawing, an image frame, and a dimensional line.

7. (Currently amended) A method of forming a drawing of a system as claimed in claim 2

further comprising:

forming drawing information of the system as a drawing file in a merchandise

information provider terminal, receiving component arrangement information and storing the

component arrangement information in the component arrangement information and estimate

information database, receiving drawing-functional component diagrams and storing the

drawing-functional component diagrams in the component diagram database, and wherein

the merchandise information provider terminal comprises a separate machine from the

computer.

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8. (Original) A method of forming a drawing of a system as claimed in claim 2 wherein:

the drawing information of said system is a perspective view.

9. (Currently amended) A method of forming a written estimate of a system in which a

plurality of components are combined based on component diagram data having drawings of

the respective components stored on a component diagram database and price data having

price information of the respective components stored on a component arrangement

information and estimate information database, the method being performed with in a

computer having a volatile memory and a processor, comprising:

receiving component arrangement information including an arrangement of the

components on a drawing and price data from the component arrangement information and

estimate information database, wherein the component diagram database comprises a

physically separate database from the component arrangement information and estimate

information database;

generating, by using the processor, drawing information of the system as a bitmap

object based on the received component arrangement information and the component

diagram data;

storing the bit map object in the volatile memory; and

generating, by using the processor, estimate information of the system based on said

received component arrangement information and said price data.

10. (Currently amended) The method according to claim 9, further including comprising:

transmitting the bitmap object stored in said volatile memory; and

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~~transmitting the estimate information of said system~~ in a merchandise information

provider terminal, receiving component arrangement information and estimate information

and storing the component arrangement information and the estimate information in the

component arrangement information and estimate information database, receiving drawing-

functional component diagrams and storing the drawing-functional component diagrams in

the component diagram database, and wherein the merchandise information provider

terminal comprises a separate machine from the computer.

11. (Original) A method of forming a written estimate of a system as claimed in claim 9

further comprising:

storing the generated estimate information and an identification number that specifies

said estimate information, whereby the written estimate can be retrieved.

12. (Currently amended) A drawing of a system in which a plurality of components are

combined, the drawing having been formed in a computer having a volatile memory and a

processor based on component diagram data having drawings of the respective components

stored on a component diagram database;

said system drawing being formed by:

receiving component arrangement information including an arrangement of the

components on a drawing from a component arrangement information and estimate

information database, wherein the component arrangement information and estimate

information database comprises a physically separate database from the component diagram

database;

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generating, by the processor, drawing information of the system as a bitmap object

based on the received component arrangement information and the component drawing data;

storing the bitmap object in the volatile memory; and

transmitting the bitmap object stored by the volatile memory.

13. (Currently amended) A written estimate of a system in which a plurality of components

are combined with each other, the system being formed in a computer having a volatile

memory and a processor based on component diagram data having drawings of the respective

components stored on a component diagram database and price data having price information

of the respective components stored on a component arrangement information and estimate

information database;

said written estimate being formed by:

receiving component arrangement information including an arrangement of the

components on a drawing from the component arrangement information and estimate

information database;

generating, by using the processor, drawing information of the system as a bitmap

object based on the received component arrangement information and the component

drawing data;

storing the bit map object;

generating, by using the processor, estimate information of the system based on said

received component arrangement information and said price data;

transmitting the bitmap object stored in the volatile memory; and

transmitting the estimate information of said system.

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14. (Currently amended) A computer program product stored on a computer readable storage medium for enabling a computer having a volatile memory and a processor to form a drawing of a system in which a plurality of components are combined with each other based on component diagram data having drawings of the respective components stored on a component diagram database, the computer program product when implemented causing the computer to execute the steps of:

receiving component arrangement information including an arrangement of the components on the drawing from the component arrangement information and estimate information database, wherein the component diagram database comprises a physically separate database from the component arrangement information and estimate information database;

producing, by the processor, drawing information of the system as a bitmap object based on the received component arrangement information and the component drawing data; and

storing the bit map object in the volatile memory.

15. (Currently amended) The method according to claim 14 wherein the product stored on the computer readable storage medium causes the computer to perform the step of

transmitting-the-bitmap-object-stored-by-said-volatile-memory in a merchandise information provider terminal, receiving component arrangement information and storing the component arrangement information in the component arrangement information and estimate information database, receiving drawing-functional component diagrams and storing the drawing-functional component diagrams in the component diagram database, and wherein

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the merchandise information provider terminal comprises a separate machine from the

computer.

16. (Currently amended) A computer readable storage medium on which is stored a data

structure used to display, on a terminal apparatus, a written estimate of a system in which a

plurality of components are combined based on (a) component diagram data having drawings

of the respective components stored on a component diagram database and (b) price data

having price information of the respective components stored on a component arrangement

information and estimate information database, the data structure being in a computer and

comprising:

      drawing information of the system which has been generated as a bitmap object based

on component arrangement information for the arrangement of the components on the

drawing and the component diagram data stored on the component diagram database; and

      cost estimate information of the system which has been generated based on said

component arrangement information and said price data stored on the component

arrangement information and estimate information database, wherein the component

arrangement information and estimate information database comprises a physically separate

database from the component diagram database.

17. (Currently amended) A computer readable storage medium on which is stored a data

structure used to display, on a terminal apparatus, a written estimate of a system in which a

plurality of components are combined based on (a) component diagram data having drawings

of the respective components stored on a component diagram database and (b) price data

having price information of the respective components stored on a component arrangement information and estimate information database, the data structure being in a computer and comprising:

drawing information of the system including a bitmap object including component arrangement information for the arrangement of the components on the drawing and the component diagram data stored on the component diagram database; and

cost estimate information of the system including costs of said component arrangement and said price data stored on the component arrangement information and estimate information database, wherein the component arrangement information and estimate information database comprises a physically separate database from the component diagram database.

18. (New) A method of forming a drawing of a system as claimed in claim 2, further comprising:

implementing a database server to transmit the component arrangement information from the component arrangement information and estimate information database to the computer, wherein the computer comprises a web and application server, and wherein the database server and the web and application server comprise different machines.

19. (New) A method of forming a written estimate of a system as claimed in claim 9, further comprising:

implementing a database server to transmit the component arrangement information from the component arrangement information and estimate information database to the

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computer, wherein the computer comprises a web and application server, and wherein the

database server and the web and application server comprise different machines.

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